Children's Mental Health Research: Filling In the Gaps

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Statement of the Research Problem

Concern for children being placed out of the home has led to the initiation of two highly visible areas of social work intervention and research: family preservation services and children's mental health services. The family preservation movement, typified by the Homebuilders Model, has mainly targeted children who are placed in foster care as a result of their family being involved in Child Protection.

In contrast, the focus of children's mental health services, exemplified by The Children and Adolescent Service System Program (CAASP), has been to increase public awareness of children with mental health needs who are in foster care, group homes, or residential services. Currently, in the field of children's mental health we are at a critical juncture needing to initiate programs to prevent out-of-home placement in an area in which there is scarce effectiveness research and gaps both in methodology and in the knowledge base.

It is helpful to learn from the research evaluating family preservation programs. Two gaps in research methodology were pointed out by Blythe, Salley, and Jayaratne, 1994. In their review article it was noted that program evaluations lacked the inclusion of instruments measuring family and child functioning and also attention to implementation monitoring. Regarding treatment integrity, or how close to the Homebuilders Model the programs were, the authors report that many intervention programs were not well defined and in the largest study (Schuerman, J.R., Rzepnicki, T.L., Littell, J.H., & Chak, A.,1993) it was reported that there was notable variation in how the model was implemented in the programs being compared. Although the outcomes are mixed concerning the effectiveness of programs, the research suggests that an intensive service model could be effective in reducing costs and improving child and family functioning.

The impetus for the Assertive Outreach Evaluation project was an attempt to find a solution to the problem of the overuse of out-of-home placement for families receiving child protection services and/or children's mental health services in a mid-size county social service agency in Minnesota. Two problem areas were identified: The expense of out-of-home placements and the socioemotional effects that placements had on children and their families. Social workers were finding that the high proportion of money spent for placements decreased the amount of money available for prevention. More specifically, this study which was an offshoot of the larger evaluation project focused on child functioning data and data pertaining to program implementation in order to address some of the gaps suggested by reviews of family preservation research.

Research Questions

The Assertive Outreach Model was proposed as a way to address the previously mentioned problems. The Assertive Outreach Model of service is characterized by multiple contacts of an assertive nature, direct provision of service, in home work with clients, a shared caseload, and a small client to staff ratio. This model was chosen based on its documented success with reducing costs and increasing client functioning in the community for adult clients with mental health problems (Stein & Test, 1980, 1985; Bond, Witheridge, Dincin, Wasmer, Webb, and DeGraaf-Kaser, 1990).

There are other intensive service models that are currently being used with the population of children with child welfare and/or child mental health needs. These service models include intensive family preservation services, intensive case work, and intensive preschool services. There is considerable overlap between these models and the Assertive Outreach model.

This study consisted of a secondary analysis of the data from the Assertive Outreach Evaluation. My purpose was to determine what more could be learned from the data pertaining to the mental health functioning of the children in the study. In addition, there were numerous questions that were raised regarding whether the intervention was implemented correctly. The major questions guiding this secondary analysis were:

Was the intervention implemented as planned?

Did the mental health functioning of children in the intervention group improve when compared to the children who received service-as usual?

Which children, with which diagnoses, showed improvement?

Was service intensity (number of worker contacts) or family status (child protection, child mental health, or both) related to an improvement in child functioning?

Methodology

The research design for the Assertive Outreach Evaluation was a Pretest-Posttest Control Group Design with random assignment to groups. A system of randomization by matching costs was used to determine the experimental and control groups. Seventy families who had the highest costs accrued in the year previous to the intervention year were determined to be the study sample. These families were then randomly assigned either to the intervention group (receiving the Assertive Outreach Model) or the comparison group which received traditional casework services.

The evaluation took place over an 18 month time period. The initial sample included all of the children in each family. The unit of analysis was the family and the intervention was intended to impact every family member. This resulted in the comparison group (n=70) having slightly more children who were assessed than the intervention group (n = 59). Unfortunately, the sample was not cleaned to exclude children age 18 and children under the age of four. Therefore, the final sample used for this study was 39 children in the Assertive Outreach group and 51 children in the comparison group.

A brief description of the Assertive Outreach Model in comparison to traditional service is as follows.

Traditional Service	**Assertive Outreach**
1. One social worker per family	1. Team of 5 social workers
2. Few contacts per month as needed	2. Multiple contacts of an assertive nature
3. Broker role	3. Direct provision of service
4. Office and in-home work	4. In-home work primarily

The data analyzed in this study consisted of pre- and post-intervention Child Behavior Checklist (Achenbach & Edelbrock, 1993) data for the children in the study and records documenting implementation of the model. The Child Behavior Check List was chosen to be the data collection instrument for child functioning because of its demonstrated high reliability and validity ratings. Validity for the instrument was demonstrated in its ability to discriminate between children referred for mental health services and matched children who were nonreferred. In addition, findings from studies indicate convergence between the empirically derived syndromes and the DSM approach (Edelbrock & Costello, 1988).

There were several methods of data collection. The primary method of data collection consisted of interviews with the families to explain and complete the data collection instruments. If a child was in foster-care, the foster parents were asked to complete the data pertaining to the children in the study who resided in their home. In addition, if a child was in residential treatment or a group home, the staff of the residence was asked to complete the Child Behavior Check List. The majority of the interviews took place in client homes, foster homes, or office space at social services. If a meeting could not be arranged, forms were mailed to clients, who then returned them by mail.

Child Welfare Targeted Case management records documenting service delivery were obtained for all the families in the sample for the 18-month duration of the study in order to determine implementation of the model. This source of data was determined to be a reliable measure of service delivery for several reasons. Social workers throughout the agency were trained in how to use these forms so that they all record information in a similar way, the data is used to receive federal funding, and these records were a standard recording device not one created for the purpose of the research.

Eight categories of social worker contact were summarized for both groups. The categories include: telephone, travel outside county, travel inside county, case management, collateral contact, reports and records, direct client contact and contact with supervisor regarding the case. The procedure for obtaining this information entailed a case aide using the county management information system to retrieve contact data for the 70 families in the study. A spreadsheet detailing contacts for each family over the course of 18 months was created from this information.

Results

The results of the comparison of pretest and posttest Child Behavior Checklist data show that there were no significant differences between the intervention and the comparison groups on total competence and total problem scores. However, when

analyzed as a whole (all of the children from both groups) There was a significant difference between time one and time two for problem scores as measured by total problem score and clinical t score (period within subject effect total problem score, $F(1,88) = 8.83$ $p<.01$, period within subject effect clinical t score, $F(1,88) = 9.62$ $p<.01$). This means that both groups of children demonstrated an increase in functioning from time one to time two.

Within the categories of externalizing and internalizing, the nine child behavior syndromes were examined to see if there were any differences between the intervention and the comparison group. The nine syndromes are: withdrawn, somatic, anxious/depressed, social problems, thought problems, attention problems, delinquent behavior, aggressive behavior and sexual behavior problems. Again the data show that there was no significant difference between the two groups regarding the nine clinical syndromes. Similar to the results previously reported, when both groups of children were considered as a whole from time one to time two, the results show that for the eight out of the nine categories there was a significant difference between time one and time two. For example in the category of attention problems the children in the Assertive Outreach group went from a mean score of 74 to a mean score of 63 and the Comparison group children went from a mean score of 77 to a mean score of 69.

Service intensity was divided into three categories, low, medium, and high. These categories represent the amount of service the families received per week for the 18 months of the study. Using the literature base as a guideline, fidelity to the assertive outreach model was defined as two contacts per week for each family. Based on this definition, a high amount of contacts was defined as two times per week or more, medium intensity was defined as less than two times per week but more than once every two weeks, and low intensity was defined as every two weeks or greater.

There was a significant difference between the children who received differing levels of service intensity for both total problem and total competence scores. More of the children who received low and medium intensity service improved their problem scores than those children who received a high level of service intensity. Of the children receiving a low level of service fifteen out of twenty-one children got better. Sixteen out of eighteen children receiving medium contacts got better, whereas, only half of the children receiving a high level of service got better (5/10) (see Table 3).

Logistic regression analysis of these data indicate that children who started out with high problem scores were less likely to get better than children who started out with low problem scores. Additionally, children who started out with high competence scores were likely to improve their competence scores (15/20), while those who started out with low competence scores were likely to stay the same or get worse (12/13).

The data show that families received different levels of service intensity based on their status. Child protection families and families who were in the category of both child mental health and child protection received services at the medium and high intensity levels in comparison with the child mental health families who received service primarily in the low and medium categories (see Table 1).

When looking at the results of the Child Welfare Targeted Case Management Records, the results show that the intervention social workers had significantly more collateral contacts with families than the comparison group. Any contacts with other professionals working with the family are considered collateral contacts. When looking at the category of direct client/family contacts it is apparent that the comparison workers had more direct contact with families. The mean number of contact hours for the comparison group was 40, whereas the mean number of direct contact hours for the intervention workers was 26. Two of the model criteria for implementation which were multiple contacts of an assertive nature and direct provision of service were demonstrated by the comparison social workers not the assertive outreach social workers (see Table 2).

Table 1

Total Contacts	n	Low	Medium	High	X2	p≤
Child Protection	15	13%	40%	47%	7.97	P=.093
Child Mental Health	31	42%	42%	16%		
Both		16	19%	38%	44%	

Table 2

Staff Contacts per Family--Direct and Collateral

Direct Contact Hours	n	Mean	SD	t	df	p≤
Assertive Outreach	35	26	19	-1.46	68	p=.150
Comparison	35	40	53			
Collateral Contact						
Assertive Outreach	35	64	57	5.52	68	.001
Comparison	35	7.9	20			

Table 3

Total Problem Change by Total Contacts

Total Contacts		Total problem			
	n	Same or Worse	Better	x2	<p
Low	21	6	15	5	.10
Medium	18	2	16		
High	10	5	5		

Additionally the following qualitative data is important. At the posttest the families were asked why their children improved. The following reasons were given by the families as to why the children improved:

Successful response to residential treatment.

Child aged out of their problems (matured).

Successful placement with relatives.

Successful transition home which included school placement (parent child conflict had subsided).

Parent and home more stable for child to live there.

Successful stability of foster home from start to finish.

Termination of parental rights ending in successful adoption, child stable.

This information suggests that placement stability is one of the many possible reasons why children improved over the 18 months of the study.

Implications for Social Work Practice

This study contributes to the field of social work in several ways. The most obvious contribution is that others can learn from the limitations that developed in this study, specifically the importance of implementation monitoring. Although the Assertive Outreach Model seemed straight forward and simple to implement, in actual practice the model proved challenging for the intervention social workers. The findings from this study regarding model implementation are highly convergent with the research literature. The literature suggests that program findings are directly related to how closely fidelity to the model is achieved (Scott & Dixon, 1995). Programs with higher model fidelity

demonstrated stronger outcomes. It makes sense that in this study there were no differences between the two groups of children because there was a low degree of model fidelity. Similar to other research findings, this study found a disparity between worker skills and the skills needed to implement the AO model. This finding converges with the work of Mowbray & Freddolino (1991) who state that implementation difficulties may result because of staff reliance on office-based practice methods and a reluctance to get out into the field.

Despite being unable to demonstrate model fidelity this study lays the groundwork for other studies that focus on the mental health of children. This study highlights how children respond to service-as-usual and how it is important to define service-as-usual before initiating a study of this scope. The knowledge that children who receive usual social work service improve over an 18-month period allows other to revise their assumptions that a change in service delivery is needed at all. Another contribution this study makes is that it reinforces the theory that placement stability, whether with biological parents or a foster home, is an important variable to consider when studying the effectiveness of interventions in the area of child mental health.

This mid-size social service agency did achieve its goal, which was to reduce the use of out-of-home placements. Consequently, costs were reduced and child functioning did not decline. However, the goal of the research project which was to test the Assertive Outreach model of service was not achieved.

This study was a beginning effort in trying to fill the gaps in current research methodology and knowledge base in the area of children's mental health. Perhaps others can move the research agenda further because of the groundwork begun in testing the Assertive Outreach model.

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